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Published in:
Nutrition and Dietetics

DOI:
[10.1111/1747-0080.12567](https://doi.org/10.1111/1747-0080.12567)

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Recommended citation(APA):
Marx, W., Kelly, J. T., Crichton, M., Craven, D. L., Collins, J., Mackay, H., Isenring, E., & Marshall, S. (2019). Telehealth improves quality of life and protein intake in malnourished older adults: A meta-analysis. *Nutrition and Dietetics*, 76(S1), 56-57. [18]. <https://doi.org/10.1111/1747-0080.12567>

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TELEHEALTH IMPROVES QUALITY OF LIFE AND PROTEIN INTAKE IN MALNOURISHED OLDER ADULTS: A META-ANALYSIS

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Feasible delivery modalities for treating malnourished older adults living at home are of interest so as to improve patient outcomes and health service use. This systematic review and meta-analysis aimed to determine the efficacy of telehealth methods in delivering malnutrition-related interventions to community-dwelling older adults. Five databases were searched for studies in any language in November 2017. Quality was assessed using the Cochrane Risk of Bias tool and the GRADE approach. Thirteen publications (n=9 studies) had mostly low to unclear risk of bias. Participants were patients following hospital discharge (n=7 studies), with kidney disease (n=1 study), or cancer (n=1 study). Telehealth via telephone consultations (n=7 studies, 0-31% attrition) appear more feasible than internet-enabled telemedicine devices (n=2 studies, 50-61% attrition). Ten meta-analyses found that compared to usual care or no intervention, telehealth interventions improved protein intake by 0.13g/kg body weight per day ([95%CI: 0.01-0.25]; P=0.03; n=2 studies; n=200 participants; I²=41%; GRADE level: low) and improved quality of life (standardised mean difference: 0.55 [95%CI: 0.11-0.99]; P=0.01; n=4 studies with n=9 quality of life tools; n=248 participants; I²=84%; GRADE level: very low). There were non-significant trends towards improved nutrition status, physical function, energy intake, hospital readmission rates, and mortality in the intervention groups. This systematic review identified telephone consultations are an effective and feasible delivery method of malnutrition-related interventions for older adults living at home and are likely to result in clinical improvements compared to usual care or no intervention. Further research with larger samples and stronger study designs are now required.